1R- 428-66

REPORTS

DATE:

30-16-2

Hobbs Jct E-32-2

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1R428-66



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NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON Governor Joanna Prukop Cabinet Secretary

March 7, 2007

Carolyn Haynes Rice Operating Company 122 West Taylor Hobbs, New Mexico 88240



Mark E. Fesmire, P.E. Director Oil Conservation Division

RE: Hobbs SWD Jct E-32-2 Site Unit Letter E, Section 32, T18S, R38E, Lea County, New Mexico Remediation Plan (1R0428-66) Termination

Dear Ms. Haynes:

The Oil Conservation Division (OCD) has received the closure report for the Hobbs SWD Jct E-32-2 site, dated December 21, 2006, and has conducted a review of the report. The closure report, submitted for the above reference site, indicates that the Rice Operating Company has met the closure requirements. Therefore, the OCD hereby approves the closure report and gives notice that the Remediation Plan (1R0428-66) is terminated.

Please be advised that NMOCD approval of this report does not relieve the owner/operator of responsibility should operations pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve the owner/operator of responsibility for compliance with any OCD, federal, state, or local laws and/or regulations.

If you have any questions regarding this matter, please contact Edward Hansen of my staff at 505-476-3489.

Sincerely,

Wayne Price Environmental Bureau Chief

WP:EJH:ejh

RECEIVED

MAR 0 9 2007 RICE OPERATING HOBBS NM

cc: Chris Williams; OCD; Hobbs District Office Randall T. Hicks, R.T. Hicks Consultants, Ltd., Albuquerque



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RICE OPERATING COMPANY JUNCTION BOX CLOSURE REPORT

\bigcirc	/									
SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DI	MENSION	S - FEET	
		_			·		Length	Width	Depth	
Hobbs	jct. E-32-2	E	29	18S	38E	Lea	no boxS	system aba	ndonment	
LAND TYPE: B	BLMST/	ATE	FEE LAND	OWNER	Occide Petroleum	ntal (OXY)	OTHER			
Depth to Groun	ndwater	65	feet	NMOCD	SITE ASSE	ESSMENT F	RANKING SO	CORE:	10	
Date Started	11/15/2	2002	Date Cor	mpleted	5/4/2006	NMOC	D Witness _		no	
Soil Excavated	12	cubic yar	rds Exc	cavation Ler	ngth <u>8</u>	Width	3	Depth	13	feet
Soil Disposed	0	cubic yar	ds Of	fsite Facility __	n	la	Location _		n/a	
General Descriptio	on of Remedial . Hicks Consultants	Action: s on January 2	This junction 20, 2006. Afte	box was addre er OCD approva	ssed accordir al, a soil borin	ng to the OCD- g was conduct	approved inve	stigation & (ite in May 2	Characteriza 006.	tion
A December 2006 letter	r by Hicks request	s closure of th	is junction box	x site and is att	ached to this	form.	· · · · · · · · · · · · · · · · · · ·			
						encl	osures: Closur	e letter from	Hicks (Dec	. 2006)
IHEREE	BY CERTIFY TI	HAT THE IN	FORMATIC KNOW	DN ABOVE I /LEDGE AN	S TRUE AN D BELIEF.	ND COMPLE	ETE TO THE	E BEST O	F MY	
REPORT ASSEMBLEI	D BY Kr	istin Farris Po	pe	SIGNATURE	Kn	, . Intin	Aan.	s Ioj) De	_
DA	ATE	12/18/2006		TITLE		Pi	roject Scientist			

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

December 21, 2006

Wayne Price Environmental Bureau Chief New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

RE: E-32-2 Junction Box Site (NMOCD CASE #: 1R0428-66)

Dear Wayne

On behalf of Rice Operating Company (ROC), R.T. Hicks Consultants, Ltd. is submitting this request to close the regulatory file for the above referenced site. The investigation demonstrated that neither salt nor hydrocarbons are present at the site in concentrations that warrant further action.

Background

The NMOCD-approved investigation characterization plan (ICP), included as Attachment A to this letter, provides the location of this site and background information.

Field Program

As a part of the approved ICP, one soil boring was advanced immediately adjacent to the former junction box on May 4, 2006. The well log and field data

(Attachment B) show that chloride field tests indicated no impact to the vadose zone. Field chloride concentrations ranged from a maximum of 61 ppm at 5 ft bgs to 28 ppm at the 25 ft and 30 ft sample depths. PID readings indicated 0 ppm throughout the boring. The chloride concentration vs. depth profile is displayed in Figure 1.

The laboratory reports (Appendix C) support the findings described above. Laboratory results in Appendix D also confirm that the backfill placed in the excavation of the former junction box is clean fill.





December 21, 2006 Page 2

Recommendations

We conclude that further action under Rule 116 is not necessary. With the placement of clean backfill, ROC has mitigated any impact caused by past operations such that the site does not and will not endanger fresh water, public health or the environment. We respectfully request closure of the regulatory file associated with this site.

ROC has reviewed and approved this submission. Please contact Kristin Pope of ROC if you have any questions or comments. Attachment D is the final closure form for your files.

Sincerely, R.T Hicks Consultants, Ltd.

Randall T. Hicks Principal

Copy: Kristin Pope, ROC NMOCD Hobbs Attachment A Investigation Characterization Plan

R. T. HICKS CONSULTANTS, LTD.

1909 Brunson Ave 🔺 Midland TX 79701 🔺 432.638.8740 🔺 Fax: 413.403.9968

CERTIFIED MAIL - RETURN RECIEPT NO. 7099 3400 0017 1737 2367

January 20, 2006

Mr. Wayne Price New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

RE: Investigation Characterization Plan: T18S R38E: E-33-1 Junction Box, B-32 Boot, E-32-1 Junction Box, E-32-2 Junction Box, F-33 Vent

Hobbs Salt Water Disposal System

Dear Mr. Price:

On behalf of Rice Operating Company, please accept this submission as our Initial Characterization Plan (ICP) for the five (5) sites referenced above within the Hobbs Salt Water Disposal System (Plate 1).

Rice Operating Company (ROC) is the service provider (operator) for the Hobbs Saltwater Disposal System and has no ownership of any portion of pipeline, well, or facility. A consortium of oil producers who own the Hobbs System (System Partners); provide all operating capital on a percentage ownership/usage basis. Major projects require System Partner authorization for expenditures (AFE) approval and work begins as funds are received. We will implement the work outlined herein after NMOCD approval and subsequent authorization from the System Partners.

For all environmental projects, ROC will choose a path forward that:

- 1. protects public health,
- 2. provides the greatest net environmental benefit,
- complies with NMOCD Rules, and
- 4. is supported by good science.

The last criteria employed when evaluating any proposed remedy or investigative work is confirming that there is a reasonable relationship between the benefits created by the proposed remedy or assessment and the economic and social costs.

Each site shall have three submissions or a combination of:

- 1. This <u>Investigation and Characterization Plan</u> (ICP) is a proposal for data gathering and site characterization and assessment.
- 2. Upon evaluation of the data and results from the ICP, a recommended remedy will be submitted in a <u>Corrective Action Plan</u> (CAP).
- 3. Finally, after implementing the remedy, a <u>closure report</u> with final documentation will be submitted.

January 20, 2006 Page 2

Task 1 Evaluate Chloride and BTEXN Concentrations in Soil at Five Sites, Evaluate Ground Water Quality if Necessary

We will follow the same protocol for characterization of the unsaturated zone at the five new ROC sites listed below.

- o E-33-1 Junction Box
- o B-32 Boot
- E-32-1 Junction Box
- o E-32-2 Junction Box
- o F-33 Vent

At each of the above-referenced sites, we will locate the sampling borehole as close as practical to the suspected release source. Earlier, we inspected each of the five sites nominated in this ICP and identified the boring location before the sites were backfilled and re-graded. Due to our recent experience with difficulties encountered in the installation of well clusters in this area, we plan to employ hollow-stem auger drilling techniques for sampling.

We will screen each sample in the field for chlorides and volatile organic compounds using the methods described in QP-03 and QP-07 (attached), respectively. Soil lithology and the presence of any observed staining or odor will be recorded. For any site, if we detect evidence of leakage within 15 feet of the water table (e.g. field chloride greater than 250 ppm in soil samples) we will complete the boring as a monitoring well in accordance with NMOCD Guidance. If three soil samples taken at 5-foot intervals test below 250 ppm chloride and below 100 ppm total volatile organic compounds, we will terminate the boring. However, all borings will penetrate at least 30 feet of the vadose zone.

Task 2 Evaluate Chloride and Hydrocarbon Flux from the Vadose Zone to Ground Water

We anticipate that one or all of the five sites selected for borehole investigation will show evidence of seepage from the source to a depth of more than 15-feet. For these sites, excavation and disposal of released material can cause more environmental damage than it cures. For such sites, we propose to employ HYDRUS-1D and a simple ground water mixing model to evaluate the potential of any residual chloride and hydrocarbon mass in the vadose zone to impair ground water quality above WQCC Standards. We have selected these two constituents for simulation modeling because each of these constituents is typically found in produced water and each is specifically regulated by New Mexico ground water regulations (WQCC). We will also employ vadose zone hydrocarbon migration predictive tools commonly employed by NMED in their PST program.

Task 3 Provide Investigative Results and/or Corrective Action Plan

Because the Hobbs SWD System no longer carries produced water, additional releases of produced water to ground water are highly unlikely. If modeling shows that the residual chloride and hydrocarbon mass in the vadose zone poses a no threat to ground water quality, we will prepare a report that makes this demonstration and request site closure.

January 20, 2006 Page 3

If simulation experiments suggest that residual constituents pose a threat to ground water quality or if the field program demonstrates impairment, we will expand upon the HYDRUS-1D model predictions described above to develop a remedy for the vadose zone. If necessary, we will simulate:

- 1. Excavation, disposal and replacement of clean soil to remove the chloride and hydrocarbon mass,
- 2. Installation of a low permeability barrier to minimize natural infiltration,
- 3. Surface grading and seeding to eliminate any ponding of precipitation and promote evapotranspiration, thereby minimizing natural infiltration, and
- 4. A combination of the above potential remedies.

We will select the vadose zone remedy that offers the greatest environmental benefit while causing the least environmental damage. If data suggest that the site has contributed chloride or hydrocarbons to ground water and caused ground water impairment, we will notify NMOCD and work collaboratively to determine the appropriate path forward.

Proposed Schedule

With NMOCD's approval of this work plan, we can perform the field activities at these sites in February or March. In late April or May, we plan to deliver any individual Correction Action Plans to address residual constituents in the vadose zone and any reports requesting site closure. If data suggest ground water impairment we plan to conduct two quarters of ground water monitoring to confirm any initial result then meet with NMOCD to develop an appropriate path forward. Your approval to move forward with this work plan will facilitate approval of expenditures by the System Partners.

Sincerely, R.T. Hicks Consultants, Ltd.

libert O. Van v

Gilbert Van Deventer Project Manager

cc: Chris Williams, NMOCD Hobbs District Office Carolyn Haynes, Rice Operating Company - Hobbs Kristin Pope, Rice Operating Company – Hobbs Randy Hicks, R. T. Hicks Consultants, Ltd. - Albuquerque



QP-03

Rice Operating Company

QUALITY PROCEDURE

Sampling and Testing Protocol Chloride Titration Using 282 Normal Silver Nitrate Solution

1.0 Purpose

This procedure is to be used to determine the concentration of chloride in soil.

2.0 Scope

This procedure is to be used as the standard field measurement for soil chloride concentrations.

3.0 Sample Collection and Preparation

- 3.1 Collect at least 80 grams of soil from the sample collection point. Take care to insure that the sample is representative of the general background to include visible concentrations of hydrocarbons and soil types. If necessary, prepare a composite sample for soils obtained at several points in the sample area. Take care to insure that no loose vegetation, rocks or liquids are included in the sample(s).
- 3.2 The soil sample(s) shall be immediately inserted into a one-quart or larger polyethylene freezer bag. Care should be taken to insure that no crosscontamination occurs between the soil sample and the collection tools or sample processing equipment.
- 3.3 The sealed sample bag should be massaged to break up any clods.

4.0 Sample Preparation

- 4.1 Tare a clean glass vial having a minimum 40 ml capacity. Add at least 10 grams of the soil sample and record the weight.
- 4.2 Add at least 10 grams of reverse osmosis water to the soil sample and shake for 20 seconds.
- 4.3 Allow the sample to set for a period of 5 minutes or until the separation of soil and water.
- 4.4 Carefully pour the free liquid extract from the sample through a paper filter into a clean plastic cup if necessary.

Rice Operating Company

QUALITY PROCEDURE Sampling and Testing Protocol for VOC in Soil

1.0 Purpose

This procedure is to be used to determine the concentrations of Volatile Organic Compounds in soils.

2.0 Scope

This procedure is to be used as the standard field measurement for soil VOC concentrations. It is not to be used as a substitute for full spectrographic speciation of organic compounds.

3.0 Procedure

- 3.1 Sample Collection and Preparation
 - 3.1.1 Collect at least 500 g. of soil from the sample collection point. Take care to insure that the sample is representative of the general background to include visible concentrations of hydrocarbons and soil types. If necessary, prepare a composite sample of soils obtained at several points in the sample area. Take care to insure that no loose vegetation, rocks or liquids are included in the sample(s).
 - 3.1.2 The soil sample(s) shall be immediately inserted into a one-quart or larger polyethylene freezer bag and sealed. When sealed, the bag should contain a nearly equal space between the soil sample and trapped air. Record the sample name and the time that the sample was collected on the Field Analytical Report Form.
 - 3.1.3 The sealed samples shall be allowed to set for a minimum of five minutes at a temperature of between 10-15 Celsius, $(59-77^{\circ}F)$. The sample temperatures may be adjusted by cooling the sample in ice, or by heating the sample within a generally controlled environment such as the inside of a vehicle. The samples should not be placed directly on heated surfaces or placed in direct heat sources such as lamps or heater vents.
 - 3.1.4 The sealed sample bag should be massaged to break up any clods, and to provide the soil sample with as much exposed surface area as practically possible.

5.0 Titration Procedure

- 5.1 Using a graduated pipette, remove 10 ml extract and dispense into a clean plastic cup.
- 5.2 Add 2-3 drops potassium chromate (K2CrO4) to mixture.
- 5.3 If the sample contains any sulfides (hydrogen or iron sulfides are common to oilfield soil samples) add 2-3 drops of hydrogen peroxide (H₂O₂) to mixture.
- 5.4 Using a 1 ml pipette, carefully add .282 normal silver nitrate (one drop at a time) to the sample while constantly agitating it. Stop adding silver nitrate when the solution begins to change from yellow to red. Be consistent with endpoint recognition.
- 5.5 Record the ml of silver nitrate used.

6.0 Calculation

To obtain the chloride concentration, insert measured data into the following formula:

282 X 35.450 X ml AgNO3	Х	grams of water in mixture
ml water extract		grams of soil in mixture

Using Step 5.0, determine the chloride concentration of the RO water used to mix with the soil sample. Record this concentration and subtract it from the formula results to find the net chloride in the soil sample.

Record all results on the delineation form.

- 3.2 Sampling Procedure
 - 3.2.1 The instrument to be used in conducting VOC concentration testing shall be an Environmental Instruments 13471 OVM / Datalogger or a similar PID-type instrument. (Device will be identified on VOC Field Test Report Form.) Prior to use, the instrument shall be zeroed-out in accordance with the appropriate maintenance and calibration procedure outlined in the instrument operation manual. The PID device will be calibrated each day it's used.
 - 3.2.2 Carefully open one end of the collection bag and insert the probe tip into the bag taking care that the probe tip not touch the soil sample or the sidewalls of the bag.
 - 3.2.3 Set the instrument to retain the highest result reading value. Record the reading onto the Field Test Report Form.
 - 3.2.4 If the instrument provides a reading exceeding 100 ppm, proceed to conduct BTEX Speciation in accordance with QP-02 and QP-06. If the reading is 100 ppm or less, NMOCD BTEX guideline has been met and no further testing for BTEX is necessary. File the Field Test Report Form in the project file.

4.0 Clean-up

After testing, the soil samples shall be returned to the sampling location, and the bags collected for off-site disposal. IN NO CASE SHALL THE SAME BAG BE USED TWICE. EACH SAMPLE CONTAINER MUST BE DISCARDED AFTER EACH USE.

Attachment B Soil Boring Log

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							LITHOLOGIC LOG
		-		MONITOD	NELL NO .		TOTAL DEDTIL 20 Foot
			D	MONITORY	CITE ID.	B-1	IDIAL DEPTR: 30 Feet
			Territe .	CON		Atkins	s Engineering COLINTY: Lea
				DRILLING	METHOD.	Hollov	w Stem Auger STATE New Mexico
PE I				STA	APT DATE:	05/04	4/06 LOCATION: T185-P38E-Sec 32-Unit E
E V	у _ Б 1 _ Б	-32-2 5-32-1		COMPLETT	ON DATE:	05/04	4/06 ETELD REP: G. Van Deventer / M. Franks
	11		6	COMPLETI	MMENTC.	Locato	ad immediately above to former junction box location
FLUG.			The second	cc	MALINIS.	Sito	use previously excepted and backfilled with remediated coil
1	And the second second	~ ~~~,	N. Williams and			Sile w	
	1	Samp	le	Blowcounts	Chloride	PID	
USCS	Depth	Time	Туре	(blows - in)	(ppm)	(ppm)	
SM							Silty loam, moderate yellowish brown (10YR 5/4), dry.
				1.0			
	-	4505	Cuttings	NIA	61		Candy selisher year note economic (40VP P/2) hard day
	5	1525	Cuttings	INA	01	U	Sandy candre, very pare drange (1017 drz), nard, dry
CAL/SM			-				
물건 만드셨네.							
				50 7"			
	10	1530	Split Spoon	50-7	56	0	Sandy caliche, very pale orange (10YR 8/2), hard, dry
							Grading to
	15	1540	Split Spoon	50 - 7"	29	0	Calcic fine-grained sand. Sand component is pale yellowish brown (10 YR 6/2), fine-grained, subangular,
SS/ CAL							moderately wen sorted, dry. Calcic matrix is very pale orange (10 YR o/2).
	20	1550	Split Spoon	50 - 10"	20	0	
		1000		00-10	23		Light brown (5 YR 5/6) fine sand, unconsolidated, subangular, well sorted.
			1.000				
0144	25	1600	Cuttings	NA	28	0	Light brown (5 YR 5/6) fine sand, unconsolidated, subangular, well sorted.
SVV							
	30	1610	Cuttings	NA	28	0	Light brown (5 YR 5/6) fine sand, unconsolidated, subangular, welt sorted.
							Bottom of boring at 30 feet below ground surface.
	25			1			
	30						
					1.1		
	40	1	1		L	1	

Attachment C Laboratory Analyses



Analytical Report

Prepared for:

Kristin Farris-Pope Rice Operating Co. 122 W. Taylor Hobbs, NM 88240

Project: Jct. E-32-2 (UNO145) Project Number: Hobbs Abandonment Location: T18S, R38E, Sec. 32, Unit Letter E

Lab Order Number: 6E11007

Report Date: 05/16/06

Rice Operating Co.	Project:	Jct. E-32-2 (UNO145)	Fax: (505) 397-1471
122 W. Taylor	Project Number:	Hobbs Abandonment	Reported:
Hobbs NM, 88240	Project Manager:	Kristin Farris-Pope	05/16/06 17:37

ANALYTICAL REPORT FOR SAMPLES

2

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1 (30')	6E11007-01	Soil	05/04/06 16:10	05/10/06 17:50

Rice Operating Co.	Project: Jct. E-32-2 (UNO145)	Fax: (505) 397-1471
122 W. Taylor	Project Number: Hobbs Abandonment	Reported:
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	05/16/06 17:37

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1 (30') (6E11007-01) Soil									
Chloride	50.5	5.00	mg/kg	10	EE61225	05/12/06	05/12/06	EPA 300.0	

Environmental Lab of Texas

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The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Rice Operating Co.	Project:	Jct. E-32-2 (UNO145)	Fax: (505) 397-1471
. 122 W. Taylor	Project Number:	Hobbs Abandonment	Reported:
Hobbs NM, 88240	Project Manager:	Kristin Farris-Pope	05/16/06 17:37

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

1		Reporting		Spike	Source		%REC		RPÐ	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EE61225 - Water Extraction										
Blank (EE61225-BLK1)				Prepared &	2 Analyzed	: 05/12/06				
Chloride	ND	0.500	mg/kg							
LCS (EE61225-BS1)				Prepared &	2 Analyzed	: 05/12/06				
Chloride	9.96	0.500	mg/kg	10.0		99.6	80-120			
Calibration Check (EE61225-CCV1)				Prepared 8	& Analyzed	: 05/12/06				
Chloride	10.9		mg/kg	10.0		109	80-120			
Duplicate (EE61225-DUP1)	Sou	rce: 6E05006-	-03	Prepared 8	2 Analyzed	: 05/12/06				
Chloride	2920	50.0	mg/kg		2870			1.73	20	
Duplicate (EE61225-DUP2)	Sou	rce: 6E11006-	-02	Prepared &	2 Analyzed	05/12/06				
Chloride	284	12.5	mg/kg		284			0.00	20	
Matrix Spike (EE61225-MS1)	Sou	rce: 6E05006-	-04	Prepared &	k Analyzed	: 05/12/06				
Chloride	3160	50.0	mg/kg	1000	2100	106	75-125			
Matrix Spike (EE61225-MS2)	Sou	rce: 6E11019-	-01	Prepared &	k Analyzed	: 05/12/06				
Chloride	984	10.0	mg/kg	200	699	142	75-125			S-0

Environmental Lab of Texas

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Rice Operating Co.	Project: Jct. E-32-2 (UNO145)	Fax: (505) 397-1471
122 W. Taylor	Project Number: Hobbs Abandonment	Reported:
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	05/16/06 17:37

Notes and Definitions

S-07	Recovery outside	Laboratory	historical of	r method	prescribed	limits
------	------------------	------------	---------------	----------	------------	--------

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported

ŝ,

- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- LCS Laboratory Control Spike
- MS Matrix Spike
- Dup Duplicate

Later of Karl 5/16/2006 Date:

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

Report Approved By:

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 4 of 4

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

CH4IN OF CUSTODY RECORD AND ANALYSIS REQUEST Project Name: JCt. E-32-2 (UN0145) Project # Hobbs Abandonment Project Location: T185, R38E, Sec 32, Unit Letter E ROC Billing Code ROC Billing Code Insult.com	While المحافة Shudge الحافة Shudge	Date Time Leboratory Comments: Acc 0.0 °C.
3-1713 3-1713 Fax No: <u>505-397-1471</u> Priceswd.com, kpope@riceswd.com, & andrew@rthicksco	(soits only) Date Sampled Hu0, Hu0, Hu0, Hu0, Na. of Containers Ice Nach Date Sampled Date Sampled	End
Nvironmental Lab of Texas Rest L20 East Phone: 432-563 Ssa, Texas 79765 Fax: Phone: 432-563 Project Manager: Kristin Pope Phone: 432-563 Project Manager: Kristin Pope Phone: 432-563 Company Name Rice Operating Company Astronany Company Address: 122 West Taylor Sampler Signature: Telephone No: 505-393-9174 Marianks@r Email results to: gil@nthicksconsult.com, mfranks@r Sampler Signature: Marian Marian	Sample Depth Geis CODE Gis CODE	-0 IN04U3 B-1 (30') 30 (n) (n) (n) (n) (n)

	Environmental Lab of Texas
*	Variance / Corrective Action Report – Sample Log-In
Client:	Rice Op.
Date/Time:	5/10/06 17:50
Order #:	6 E11007
Initials:	CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	<u>_ NO </u>	<u> </u>
Shipping container/cooler in good condition?	YEST	No	}
Custody Seals intact on shipping container/cooler?	1 YES	No	Not present
Custody Seals intact on sample bottles?	1001	No	Not present 1
Chain of custody present?	YES	No	
Sample Instructions complete on Chain of Custody?	631	Na	i
Chain of Custody signed when relinquished and received?	1000	No	
Chain cf custody agrees with sample label(s)	Yes 1	No	
Container labels legible and intact?	15	No	
Sample Matrix and properties same as on chain of custody?	1 YES	No	
Samples in proper container/bottle?	1 Keg 1	No	• [
Samples properly preserved?	23	No	
Sample bottles intact?	Y09	No	
Preservations documented on Chain of Custody?	(ES	I No	
Containers documented on Chain of Custody?	(ês	Na	
Sufficient sample amount for indicated test?	65	No	
All samples received within sufficient hold time?	YE?	No	
VOC samples have zero headspace?	Yes	No	(NCt Apolicable

Other observations:

Variance Documentation: DataTima

.

Date/Time:	Contacted by:	
~		
	Date/Time:	Date/Time:Contacted by:

a a second a . 4

•	Environmental Lab of Texas
•	Variance / Corrective Action Report - Sample Log-In
at:	Rice op.
e/Time:	4/4/01/8:10
er #:	60003
als:	UL-

Sample Receipt Checklist perature of container/cooler? Yes No 5.0 CI Contraction of the second seco ping container/cooler in good condition? No tody Seals intact on shipping container/cooler? No Not present tody Seals intact on sample bottles? VES 1 No Not present in of custody present? No pes nple Instructions complete on Chain of Custody? No Es in of Custody signed when relinquished and received? Č5 No 1 sin of custody agrees with sample label(s) No 103 itainer labels legible and intact? No Ves 1 nple Matrix and properties same as on chain of custody? G I No noles in proper container/bottle? No χœъ. mples properly preserved? 103 1 No mple bottles intact? YEDI No servations documented on Chain of Custody? Ø No ntainers documented on Chain of Custody? No ASS 1 fficient sample amount for indicated test? No Xag 1 samples received within sufficient hold time? Yrz No)C samples have zero headspace? (res) No Not Applicable

ther observations:

entact Person: egarding:	Variance Documentation: Date/Time:	Contacted by:
prrective Action Taken:		
ser en anne en ser e	د سر جری ۲۰۰۰ می می موسط می می در این می در این می ورد این می میرانی مراجع	in Maynester (2) is 2 i say (2) the second



Analytical Report

Prepared for:

Kristin Farris-Pope Rice Operating Co. 122 W. Taylor Hobbs, NM 88240

Project: Jct. E-32-2 (UNO145) Project Number: Hobbs Abandonment Location: T18S, R38E, Sec. 32, Unit Letter E

Lab Order Number: 6E11007

Report Date: 05/16/06

Rice Operating Co.	Project: J	let. E-32-2 (UNO145)	Fax: (505) 397-1471
122 W. Taylor	Project Number: H	Hobbs Abandonment	Reported:
Hobbs NM, 88240	Project Manager: H	Kristin Farris-Pope	05/16/06 17:37

ANALYTICAL REPORT FOR SAMPLES

.

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1 (30')	6E11007-01	Soil	05/04/06 16:10	05/10/06 17:50

Rice Operating Co.	Project: Jct. E-32-2 (UNO145)	Fax: (505) 397-1471
122 W. Taylor	Project Number: Hobbs Abandonment	Reported:
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	05/16/06 17:37
	· · · · · · · · · · · · · · · · · · ·	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1 (30') (6E11007-01) Soil									
Chloride	50,5	5.00	mg/kg	10	EE61225	05/12/06	05/12/06	EPA 300.0	

Environmental Lab of Texas

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The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

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12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Rice Operating Co.	Project: Jct. E-32-2 (UNO145)	Fax: (505) 397-1471
122 W. Taylor	Project Number: Hobbs Abandonment	Reported:
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	05/16/06 17:37

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limít	Notes
Batch EE61225 - Water Extraction		·								
Blank (EE61225-BLK1)				Prepared &	k Analyzed	05/12/06				
Chloride	ND	0.500	mg/kg							
LCS (EE61225-BS1)				Prepared &	Analyzed	05/12/06				
Chloride	9.96	0.500	mg/kg	10.0		99.6	80-120			
Calibration Check (EE61225-CCV1)				Prepared &	2 Analyzed	05/12/06				
Chloride	10.9		mg/kg	10.0		109	80-120			
Duplicate (EE61225-DUP1)	Sou	rce: 6E05006-	-03	Prepared &	Analyzed	05/12/06				
Chloride	2920	50.0	mg/kg		2870			1.73	20	
Duplicate (EE61225-DUP2)	Sou	rce: 6E11006-	-02	Prepared &	Analyzed	05/12/06				
Chloride	284	12.5	mg/kg		284			0.00	20	
Matrix Spike (EE61225-MS1)	Sou	rce: 6E05006-	04	Prepared & Analyzed: 05/12/06						
Chloride	3160	50.0	mg/kg	1000	2100	106	75-125			
Matrix Spike (EE61225-MS2)	Sou	rce: 6E11019-	-01	Prepared &	a Analyzed	05/12/06				
Chloride	984	10.0	mg/kg	200	699	142	75-125			S-0'

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Rice Operating Co. 122 W. Taylor Hobbs NM, 88240		Project	Fax: (505) 397-1471	
		Project Number: Project Manager:	Hobbs Abandonment Kristin Farris-Pope	Reported: 05/16/06 17:37
		Notes and De	finitions	
S-07	Recovery outside Laboratory histo	orical or method prescribed limits.		
DET	Analyte DETECTED			

Analyte NOT DETECTED at or above the reporting limit

Sample results reported on a dry weight basis

Laler, & L. Salk. 5/16/2006 Report Approved By: Date:

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

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ND

NR

dry RPD

LCS

MS

Dup

Not Reported

Matrix Spike

Duplicate

Relative Percent Difference

Laboratory Control Spike

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

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Environmental Lab of Texas nple Log-In

	Variance / Corrective Action Report – Sa	an
Client:	Rice Op.	
Date/Time:	5/10/06 17:50	
Order #:	6 E11007	
Initials:	Cik	

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	0,0 C
Shipping container/cooler in good condition?	Yesi	No	
Custody Seals intact on shipping container/cooler?	YES	No	Not present
Custody Seals intact on sample bottles?	6	No	Not present 1
Chain of custody present?	YES	No	1
Sample Instructions complete on Chain of Custody?		Na	i
Chain of Custody signed when relinquished and received?	1000	No	
Chain of custody agrees with sample label(s)	Yes	No	
Container labels legible and intact?	Jes I	No	
Sample Matrix and properties same as on chain of custody?	1 CES	No	
Samples in proper container/bottle?	YES	No	. 1
Samples properly preserved?	123	No	
Sample bottles intact?	¥03	I No	1
Preservations documented on Chain of Custody?	1 (69	No No	
Containers documented on Chain of Custody?	125	No_	
Sufficient sample amount for indicated test?	(at	No	
All samples received within sufficient hold time?		l No	
VOC samples have zero headspace?	Yes	No	Not Apolicable

Other observations:

Regarding:

Variance Documentation:
 Variance Documentation:

 Centact Person: -_____ Date/Time: ______ Contacted by: ______

_____.

Corrective Action Taken:



Attachment D Closure Form



RICE OPERATING COMPANY

JUNCTION BOX CLOSURE REPORT

			E		TION					
SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIF	RANGE	COUNTY	BOX DI	MENSIONS	- FEET	
Hobbs		E	29	18S	38E		Length	Width	Depth	
	jct. E-32-2					Lea	no boxS	System abar	ndonment	
LAND TYPE: B	LMSTA	ATE	FEE LAND	OWNER	Occide Petroleum	ental I (OXY)	OTHEF			
Depth to Groun	dwater	65	_feet	NMOCD S	BITE ASSE	SSMENT R	Anking S	CORE:	10	
Date Started	11/15/2	002	_ Date Cor	npleted	5/4/2006		D Witness		no	<u> </u>
Soil Excavated	12	cubic ya	ards Exc	avation Le	ngth <u>8</u>	Width	3	Depth	13	feet
Soil Disposed	0	cubic ya	ards Off	site Facility	<u> </u>	/a	Location		n/a	
General Descriptic	on of Remedia	Action:	This junction	box was add	ressed accord	ding to the OC	D-approved I	nvestigation a	& Characte	rization
Plan submitted by R.T	. Hicks Consultar	its on Januar	y 20, 2006. A	fter OCD app	roval, a soil b	oring was con	ducted at the	box site in M	ay 2006.	
A December 2006 lette	er by Hicks reque	sts closure o	f this junction	box site and i	s attached to	this form.				
·					, , , , , , , , , , , , , , , , ,	enck	osures: Closu	re letter from	Hicks (Dec	: 2006)
I HEREBY	CERTIFY TH	AT THE IN	IFORMATIC	ON ABOVE LEDGE AN	IS TRUE A	AND COMP	LETE TO T	HE BEST	OF MY	
REPORT ASSEMBLE	D BY <u>K</u>	istin Farris P	оре	SIGNATURE	<u> </u>					
Di	ATE	12/18/2006		TITLE		P	roject Scientis	st		_